- 6 or 13, classified in class 536, subclass 23.1.
- III. Claims 16-18, drawn to method of preventing infection, classified in class 424, subclass 190.1.
- IV. Claim 19 and 22 drawn to a method of diagnosing infection, classified in class 435, subclass 23.1.
- V. Claim 26 and 27 drawn to DNA of SEQ ID No 30, 18 subclass 23.1.
- VI. Claim 26 and 28 drawn to DNA of SEQ ID NO: 31, 32 classified in class 536, subclass 23.1.
- VII. Claim 26 and 29 drawn to DNA of SEQ ID NO: 36, 37, classified in class 536, subclass 23.1.
- VIII. Claims 30 and 31, drawn to an amino acid sequence of SEQ ID NO: 18 classified in class 530, subclass 350.
- IX. Claim 30 and 32 drawn to an amino acid sequence of SEQ ID NO: 32 classified in class 530, subclass 350.
- X. Claim 30 drawn to an amino acid SEQ ID NO: 37, classified in class 530, subclass 350.
- XI. Claim 33 drawn to an amino acid sequence of SEQ ID NO: 38, classified in class 530, subclass 350.

Inventions II and I are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case, the product as claimed

can be made by another and materially different apparatus, specifically biochemical synthetic synthesis, or punfication from the bacterial natural source.

Inventions I and VIII, lx, X, or IX are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention each protein evidences a different sequence based upon SEQ ID NO, has a different chemical structure (amino acid structure) function which results in a different biological effect has separate utility such as immunogens, diagnostics, reagents for the purification of a different population of antibodies and for formulation of molecular image polymers specific to the protein. See MPEP \$806.05(d).

Inventions II and V, or VII are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Groups II, V, VI, and VII all differ in the number of nucleotides presented by each SEQ ID NO and encode proteins or polypeptides of differing sizes, structures and biological effects, each has separate utility such as for stimulating different populations of antibodies, and for detecting different genera, species and strains of pathogen. See MPEP § 806.05(d).

Inventions I and III or IV are related as product and process of use. The inventions can be shown to be distinct if either or

both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process of using that product, wherein the product can be used to immunize an animal, detect infection, produce antibodies for use in purification of the cytotoxin, and formulation of molecular image polymers.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required tinder 37 CFR 1.1 7(1).

Applicants elect, with traverse, to prosecute Group I, claims 1-7, 12-15 and 23-25.

Applicants traverse the Restriction Requirement on the basis that at least with regard to Group I and III, the restriction is not proper. Claims 1-7 (Group I) concern the cytotoxin obtained from Moraxella bovis. Claims 16-18 concern a met using the same cytotoxin as claimed in claims sequences as sequences of claims 12-15 and usir 23-25. Moreover, it is Applicant's position (Group IV) should also be examined in the same

481.06 5 <u>PATENT</u>

Once Examiner searches the Group I for references to cytotoxin of *M. bovis*, any method for diagnosis or prophylaxis will necessarily be found and by the same correlation, when Group III or IV would be searched, *M. bovis* cytotoxin references would be found. The claims of groups I, III and IV are related as a composition and the use for such composition.

It is respectfully requested that Examiner reconsiders her Restriction Requirement and examine Group I, III and IV at the same time in one application.

If fees are required with the filing of these documents, the Commissioner is authorized to charge such fees to Deposit Account No. 16-1331.

Respectfully submitted,

Date: August 19, 2002

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Attorney of Record

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